

REMARKS

Claims 10-19, 22-24 and 26-37 are pending.

Claims 10 and 22 were revised to be in more structural language. While not limiting the claims to particular side walls or lateral projections, the "longitudinal" direction in the claims is parallel to the side walls 7 shown in Fig. 1 of the present invention; the "transverse" direction in the claims is the direction generally perpendicular to the longitudinal direction; and the term "inner" in the claims regarding the lateral projections (15) refers to between the sidewalls.

Claims 10 and 22 were also amended as supported by Fig. 8 to recite

"each of the first and second side walls comprising at least one lateral projection extending directly from a lower edge of the sidewalls, respectively, to face laterally inwardly towards the respective other side wall of the first and second side walls for grasping engagement with a lower surface of the multi-well plate to secure the lid sealingly to the multi-well plate"
and

"the pair of side walls extend downwardly from the top cover a sufficient length for the lateral projections to contact a lower surface of the multi-well plate in the third grasping position."

Claim 12 was amended to recite, "wherein the side walls further ~~include~~ comprise stacking lugs projecting downward from the side walls lower edges, respectively, a distance lower than the lateral projections." This is shown by Fig. 5.

Claim 14 was amended to recite stacking locators taken from Claim 15.

Claim 15 was amended to recite slots as supported by Fig. 1.

Claims 20 and 21 were cancelled.

Claim 23 was amended to correspond to Claim 12 but depend from Claim 22.

Claim 24 is revised to be in more structural language.

New Claims 26 and 27 correspond to Claims 14 and 15 but depend from Claim 23.

Claims 28, 29, 30 and 31 are supported by Fig. 5.

Independent Claims 32 and 35 are supported as is Claim 12.

Claims 33 and 34, as well as 36 and 37, are supported as are Claims 14 and 15.

The specification and drawings have been amended consistent with above claim amendments. For example, Fig. 1 and the specification were amended to refer to longitudinal axis "L".

I. Claim Objections

Claims 20, 21, and 23-25 are objected to under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. As stated above, Claims 20 and 21 were cancelled. Claim 23 was amended to recite Claim 12 but depend from Claim 22. The objection of Claims 20, 21, and 23 are moot and the objection of Claims 24 and 25 is overcome.

II. Claim Rejections - 35 USC 112

Claims 10-25 are rejected under 35 USC 112, second paragraph. Claims 10 and 22 have been amended to be in more structural language. Claims 1 and 16 have been amended to be clearer in response to the Section 112 rejection of Claim 16. The first (upper) side of each side wall is integral with the upper section and the clamp is located at the second (lower) side of each side wall.

Claims 20, 21, 24 and 25 are rejected for being indefinite. Claims 20 and 21 have been cancelled. Claim 24 has been amended to overcome this rejection. Applicant thanks the Examiner for suggesting alternative language for Claim 24 and amended this claim consistent with the suggestion. In Claim 24, the term "opposed peripheral longitudinal side portions refers to side portions substantially parallel to the longitudinal axis of the lid. It is respectfully submitted Claim 24 further defines the invention because it recites the curvature is sufficient to avoid part of the gasket contacting the plate upper surface in the recited position. This distinguishes from curvatures so slight as to permit the entire gasket to contact the plate upper surface in the recited position.

Claim 22 and 25 was amended to add language from Claim 25 clarified, to overcome this rejection. Claim 25 was cancelled

III. 35 USC 102/103(e)

A. Finneran

Claims 10, 12-14, 16-18 and 20-25 are rejected under 35 USC 102(e) as anticipated by, or in the alternative, under 35 USC 103(a) as obvious over US Patent No. 6,193,064 to Finneran. This rejection is respectfully traversed.

As stated above, Claims 10 and 22 were amended to recite

"each of the first and second side walls comprising at least one lateral projection extending directly from a lower edge of the sidewalls, respectively, to face laterally inwardly towards the respective other side wall of the first and second side walls for grasping engagement with a lower surface of the multi-well plate to secure the lid sealingly to the multi-well plate"

and

"the pair of side walls extend downwardly from the top cover a sufficient length for the lateral projections to contact a lower surface of the multi-well plate in the third grasping position."

In contrast, the lugs 24 of Finneran cover 22 only extend a short distance and lock into the slots 14, 18 of the sidewalls of the next below structure rather grasp an underside (lower surface) of the next below structure. The slots 14, 18 of Finneran are located near the upper edges of the respective perimeters of the base plate 4 and spacer 16 (*see* Finneran, Figs. 3A, 3B). The short lugs and relatively high slots of Finneran are needed because Finneran wants the ability to put one or more spacers between the base plate 4 and cover 22 so vials of different lengths may be placed in the plate (*see* Finneran, Abstract).

Claim 12, Claim 23 and new independent Claims 32 and 35 emphasize the stacking lugs to distinguish over Finneran. Claims 12 and 23 recite, "wherein the side walls further ~~include~~ comprise stacking lugs projecting downward from the side walls lower edges, respectively, a distance lower than the lateral projections." New independent Claim 32 recites, "wherein each said side wall further comprises at least one stacking lug projecting downward from a lower edge of the respective side wall a distance lower than the respective at least one lateral projection."

Finneran neither has such stacking lugs, nor would it be obvious to modify the teachings of Finneran to have this feature. As explained above, the lugs 24 of Finneran only extend a short distance and lock into the sidewalls of the next below structure to give the apparatus the ability to insert additional spacers between the cover and plate. Extensions projecting from the side wall lower edges, downwardly below the portion of the lug 24 that locks into a side wall of

Finneran, a sufficient distance to act as stacking lugs would interfere with the ability of Finneran to insert additional spacers between the cover and plate.

Claims 13, 14, 33, 34, 36 and 37 further distinguish over Finneran by reciting the sidewalls have stacking locators and slots, respectively. Finneran neither teaches nor suggests these features.

B. Finneran in view of US Patent No. 6,486,401 to Warhurst et al.

Claims 11-15 are rejected under 35 USC 103(a) as being unpatentable over Finneran in view of US Patent No. 6,486,401 to Warhurst et al.

As stated above, amended base Claim 10 recites,

"each of the first and second side walls comprising at least one lateral projection extending directly from a lower edge of the sidewalls, respectively, to face laterally inwardly towards the respective other side wall of the first and second side walls for grasping engagement with a lower surface of the multi-well plate to secure the lid sealingly to the multi-well plate"

and

"the pair of side walls extend downwardly from the top cover a sufficient length for the lateral projections to contact a lower surface of the multi-well plate in the third grasping position."

Neither Finneran nor Warhurst et al teach or suggest this. Warhurst et al.'s torsion spring wire legs 25 are not lateral projections.

As explained above, it would be improper to modify Finneran to have its lugs contact a lower surface of the next-below structure because Finneran requires a sufficiently short lug to lock into a notch in the side wall of the next-below structure. Thus, Warhurst et al. cannot make up for this deficiency and Claims 11-15 depending from Claim 10 distinguish over the references.

Moreover, the Office action asserts, "Warhurst et al. discloses the sidewalls of the lid with means for aligning the cover with an adjacent cover when the cover is in a stack of like covers comprising stacking locators which engage the stacking lugs that project downward from the side walls to allow stacking of assemblies of covered multi-well plates onto one another for efficient storage (figs 3a, 4; col. 1, lines 12-16; col. 3, lines 38-52)." This assertion it is respectfully traversed.

Claim 12 further distinguishes over the references. Neither reference teaches or suggests the side walls further comprise stacking lugs projecting downward from the lower edges of the side walls a distance lower than the lateral projections. Finneran cannot extend his sidewalls as explained above to have the present lateral projections. The only elements of Finneran which could arguably be termed a side wall are lugs 24. As explained above, the lugs of Finneran are kept short to retain the ability to insert spacer element(s) between its tray and its cover. Thus, it follows it could also not further extend them to have the present stacking lugs. Warhurst et al. does not teach or suggest the claimed stacking lugs. The Warhurst et al. spring wire torsion springs 25 are not stacking lugs and they extend from an upper edge of respective sidewalls, not a lower edge.

It appears the Office action is relying upon the statement in Warhurst et al., col. 3, lines 38-41, "Leg clearance notches 32 on the top and bottom of the sealing cover allow for (i) stacking unused plate sealing covers on another cover, and (ii) stacking covered multi well plates onto one another. However, the leg clearance notches 32 of Warhurst et al. are not stacking lugs.

The stacking lugs of new independent Claims 32 and 35 also distinguish over these references.

Claim 13 further distinguishes over the references. It recites the side walls further comprise means for laterally and longitudinally aligning the cover with an adjacent cover when the cover is in a stack of like covers. The leg clearance notches 32 of Warhurst et al. cannot do this. The lower leg clearance notches 32 of Warhurst et al. (not properly labeled in Fig. 4 and better seen unlabelled in Fig. 3A) provide a location for the torsion spring wire legs 25 to completely fold to be flush when the cover is not in use (as shown for the topmost cover 22 in Fig. 4). This permits an unused cover to sit on another cover but there is no lateral and longitudinal alignment of the covers due to the notches. The upper leg clearance notches 32 of Warhurst et al. provide a place for the torsion spring wire legs 25 to sit when a combination of a plate and a grasping cover is further placed over another cover. This is also shown in Fig. 4 where the middle labeled cover 22 is grasping an unlabelled plate 10 and placed over the lowest cover 22. The upper notches 32 permit stacking but do not guide placement to provide lateral and longitudinal alignment. In fact, because the notches 32 are open, an upper plate or an upper cover/plate combination could slide off a lower cover.

Claim 14 distinguishes over the references by reciting the side walls further comprise

stacking locators positioned in the side walls, the stacking locators being positioned to engage the stacking lugs of the adjacent cover.

Claim 15 further distinguishes over the references by reciting the side walls define slots positioned in the side walls to engage the stacking lugs of the adjacent cover. As stated above, Warhurst et al. does not teach the present stacking lugs nor could Finneran be modified to have the present stacking lugs so it follows there is no motivation to provide stacking locators or slots to engage the stacking lugs..

C. Finneran Applied against Claims 17 and 18

Alternatively, Claims 17 and 18 are rejected as being unpatentable over Finneran. These claims distinguish over the reference at least as does their base claim.

D. Finneran in view of Munson et al. and Bjornson et al.

Claim 19 is rejected as being unpatentable over Finneran in view of US Patent No. 6,379,626 Munson et al. and US Patent No. 6,103,199 to Bjornson et al. The secondary references fail to make up for the deficiencies of Finneran.

E. Finneran in view of Sanadi

Claim 16 is rejected as being unpatentable over Finneran in view of US Patent No. 5,741,463 to Sanadi.


The "clamp" of Fig. 3 of Sanadi is not a lateral projection inwardly directed from the sidewall and does not contact a lower surface of the plate. Thus substituting the clamp of Sanadi for the lugs of Finneran still fails to teach or suggest the present invention.

IV. Conclusion

In view of the above it is respectfully submitted that all objections and rejections are overcome. Thus, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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Amendments to the Drawings

Amended drawings are attached as ATTACHMENT I to this amendment.

Fig. 1 has been amended to add a longitudinal axis "L".

Fig. 5 has been amended to label a first portion 15A and a second relatively distal portion 15B and a distal end 15C of the respective multi-well plate holder or clamp 15.